



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,410	11/18/2003	Robert B. Chaffee	C0852-703030	7257
37462	7590	01/04/2006	EXAMINER	
LOWRIE, LANDO & ANASTASI RIVERFRONT OFFICE ONE MAIN STREET, ELEVENTH FLOOR CAMBRIDGE, MA 02142			SAFAVI, MICHAEL	
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/717,410	Applicant(s) CHAFFEE, ROBERT B.	
	Examiner M. Safavi	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 17-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 66-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/2/04; 4/28/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Applicant's election with traverse of the invention of Group I in the reply filed on August 29, 2005 is acknowledged. The traversal is on the ground(s) that a search and examination can be made without a serious burden upon the examiner. This is not found persuasive because there would be a serious burden upon examiner in searching for all inventions defined by all claims as well as for all species disclosed and claimed as well as in formulating and setting forth a rejection to each invention and species of the invention.

The requirement is still deemed proper and is therefore made FINAL.

Claims 17-65 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 29, 2005.

Information Disclosure Statement

Applicant's reference to various PCT applications on page 2 of the IDS submitted August 02, 2004 has been noted. However, it is not clear as to the specific relationship between any of the referenced PCT applications and the instant application or related applications.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 3673

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16 and 66-68 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not appear to have originally presented a valve having a "self-closing" cover as now appears recited in claim 1. The specification does not appear to have originally presented a valve having a "self-closing" cover "hingedly coupled to the inflatable bladder" as now appears recited in claim 66.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 10, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8, lines 2-3, "the pump" lacks antecedent basis within the claim. Therefore, it is not clear as to what "the pump" refers.

Claim 10, lines 1-2, "the pump" lacks antecedent basis within the claim. Therefore, it is not clear as to what "the pump" refers.

Claim 11, line 1, "the pump" lacks antecedent basis within the claim. Therefore, it is not clear as to what "the pump" refers.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 10, 11, 13-15, 66, and 67 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,175,297 to Robbins et al. As for **claims 1, 7, 13, 66, and 67**, Robbins et al. '297 discloses, Figs. 1 and 6, an inflatable device, comprising an inflatable bladder 10 and a fluid controller 30/40/60 comprising a valve, (within 40), coupled to the inflatable bladder 10. The valve is configured and arranged to control the flow of fluid into and out of the bladder. The valve comprises a diaphragm 42, 53 with a "self-closing" cover 43/44, 54, 55, (hingedly coupled to the "device", **claim 66**). An electro/mechanical device 48 is configured and arranged to open the valve when the electro/mechanical device is actuated. As for **claim 10**, pump is at 40. As for **claims 14 and 15**, supplemental material of the mattress 10 can be any portion thereof with a

portion 26, 28 of the fluid controller at least partially supported by the supplemental material. As for **claim 11**, pump 40 is housed in an acoustically insulative material by virtue of the pump being surrounded by the housing 48.

Claims 1-6, 10-16, 67, and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Publication 2002/0194678 to Chung. As for **claims 1, 13, and 67**, Chung '678 discloses, Figs. 4A, 4C, 4F, 5A, 6, and 8C, an inflatable device, such as a mattress, comprising an inflatable bladder 41, 51 and a fluid controller 43, 53/63 comprising a valve 431/4302, 431'/4302', (similar parts in Fig. 6), coupled to the inflatable bladder 41, 51. The valve is configured and arranged to control the flow of fluid into and out of the bladder. The valve comprises a diaphragm 436, 64 with a "self-closing" cover 436', 65. A mechanical device 4311/4313/4314, 632 is configured and arranged to open the valve when the electro/mechanical device is actuated. As for **claim 10**, pump is at 435, 633 and can be seen supported by the inflatable bladder, **claim 16**. As for **claims 14 and 15**, supplemental material of the mattress 41, 51 can be any portion thereof with a portion 26, 28 of the fluid controller at least partially supported by the supplemental material as can be seen in Figs. 4A and 5A. As for **claims 2, 5, 12, and 68**, the inflatable device further comprises a compartment 430, 63, (as well as 61/62), surrounding the valve components including the "mechanical device", coupled to and disposed with the profile of the bladder, as can be seen in Figs. 4A and 5A. Thus the mechanical device is coupled to the bladder and supported by the bladder, (**claim 6**). The compartment is configured and arranged to enclose the valve, the compartment

Art Unit: 3673

being adapted to receive pressurized fluid from a pump, see Figs. 4F and 6, for example. As for **claim 11**, pump 435, 633 is housed in an acoustically insulative material by virtue of the pump being surrounded by the housing. As for claim 3, the valve is a self sealing valve and the cover is adapted to prevent the valve from opening in the presence of air-pressure in the compartment, (see, for example, cover 65 which when closed "prevents the valve from opening in the presence of air-pressure in the compartment". As for **claim 4**, the diaphragm and the mechanical device are configured so that when the mechanical device 632 is actuated it biases open the cover 65 and the diaphragm 64. Further, the diaphragm and the mechanical device are configured so that when the mechanical device 4311/4313/4314, (both sides), is actuated it biases open the cover 436' and the diaphragm 436.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication 2002/0194678 to Chung.

Figs. 7A, 7D, and 7E of Chung '678 disclose use of a micro switch in conjunction with the mechanical device serving to open the valve. Therefore, to have provided any of the Chung '678 Fig. 4A, 4C, 4F, 5A, 6, and 8C embodiments with an electro/mechanical

Art Unit: 3673

device serving to open the respective valve, thus providing an automatic operation of the valve assembly, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Figs. 7A, 7D, and 7E of Chung '678.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (571) 272-7046. The examiner can normally be reached on Mon.-Thur., 8:30-5:00.



MICHAEL SAFARI
PRIMARY EXAMINER
ART UNIT 3673

M. Safavi
November 10, 2005